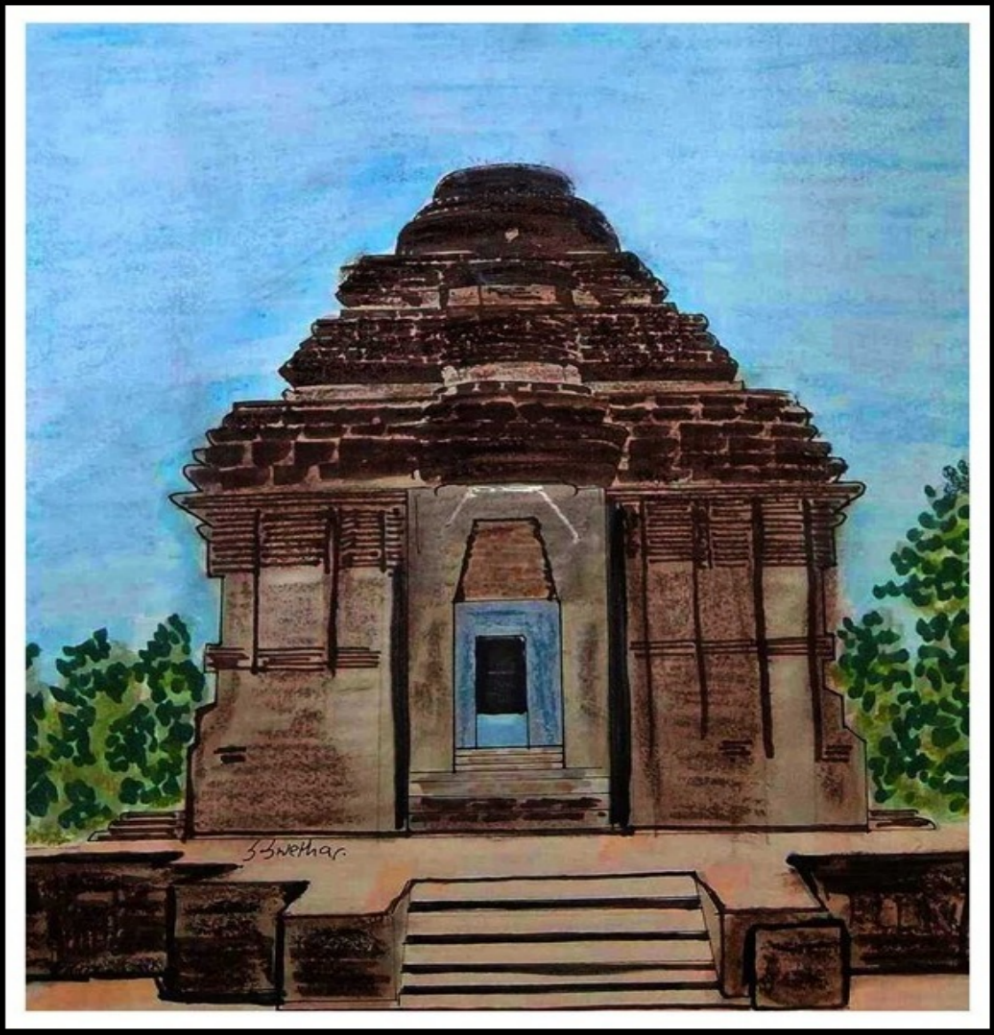


Konark Temple: A Soul's Symbolic Journey

By

Swetha Sundaram

*AI tools or technologies were **not used** to prepare thisbook.*

Konark Temple: A Soul's Symbolic Journey

Swetha Sundaram

Copyright:

This ebook is free for personal use and distribution. You are encouraged to share and distribute this unmodified PDF with others, provided that:

1. *You do not charge a fee for the ebook.*
2. *You do not alter, transform, or build upon the content.*
3. *You include this original copyright notice in all shared copies.*

All other rights are reserved. *No part of this publication may be sold, licensed, or used for commercial purposes without prior written permission from the author.*

Disclaimer

The information in this book is for educational/informational purposes only. The author assumes no responsibility for errors or omissions. Use at your own risk.

This ebook is copyright material and must not be copied, reproduced, transferred, distributed, leased, licensed or publicly performed or used in any way except as specifically permitted in writing by the author, as allowed under the terms and conditions under which it was permitted by applicable copyright law. Any unauthorised distribution or use of this text may be a direct infringement of the author's rights, and those responsible may be liable in law accordingly.

Copyright © 2026 Swetha Sundaram
All rights reserved.

Contents

Abstract 7
Historical Background: 7
Vaishnavism In Odisha.....9
Symbolism behind Sun Worship ...13
The Target of Solar Worship: 13
Architectural Symbolism: 17
The Time Lost in Worldly Pursuit: 17
The Charioteer - Symbolism: 19
The Turning Point – Makara Sankranthi: 21
Mayadevi: 23
Architectural Details.....25
Rekha Deula: 26
Pidha Deual 27
Khakhara Deula 27
Construction Details 31
Collapse of the Temple 35
References 37
About The Author.....39

Abstract

This article analyses the symbolism of the Konark Sun Temple, which makes the temple a pictorial representation of the Upanishads. This article is written from the author's perspective. The article also focuses on Kalingan Style architecture and the construction methods employed from an engineering perspective.
The article also examines possible reasons that led to the temple's collapse.

Historical Background:

The age of the temple, after much archaeological debate, was assigned to the period of King Narasimhadeva of the Eastern Ganga Dynasty, i.e the temple was said to have been constructed in the 13th century. However, Abul Fazl in his work Ain-i-Akbari assigns the date when this temple was completed to 850 AD, 873 AD.
The word Konark is a compound word from Kona + Arka. Kona means angle, and Arka means fire or sun. The word Konarka could refer to the entry of the Sun into the constellation Aquarius, known as Agni-Kona, which is celebrated as Ratha Sapthami.

Excerpt from Ain-I-Akbari

The three images are washed six times every day and freshly clothed. Fifty or sixty priests wearing the Brahmanical thread, stand to do them service and each time large dishes of food are brought out and offered to the images, so that twenty thousand people partake of the leavings.[3] They construct a car of sixteen wheels which in Hindi, they call *Rath*, upon which the images are mounted, and they believe that whosoever draws it, is absolved from sin and is visited by no temporal distress. Near Jagannáth is a temple dedicated to the Sun.[4] Its cost was defrayed by twelve years revenue of the province. Even those whose judgment is critical and who are difficult to please stand astonished at its sight. The height of the wall is 150 cubits[5] high and 19 thick. It has three portals. The eastern has carved upon it the figures of two finely designed elephants, each of them

overpowered. In front[1] is an octagonal column of black stone, 50 yards high. When nine flights of steps are passed, a spacious court appears with a large arch of stone upon which are carved the sun and other planets. Around them are a variety of worshippers of every class, each after its manner, with bowed heads, standing, sitting, prostrate, laughing, weeping, lost in amaze or in wrapt attention and following these are divers musicians and strange animals which never existed but in imagination. It is said that somewhat over 730 years ago[2]

Vaishnavism In Odisha

The religion in Odisha during medieval times was closely associated with the worship of Lord Jagannatha, to such an extent that the worship of Lord Jagannatha formed the backbone of religious worship in Odisha.

All other religious philosophies, such as Saktism, Saivism, Buddhism, and Jainism, that flourished during medieval times, absorbed the practices of Jagannath worship and vice versa.

Vaishnavism is the foundation of medieval Odisha. We know that Swami Ramanujacharya visited Puri, which is known as Purushottam Kshetram in the ancient Vedic scriptures. Purushottam Kshetram is an important kshetram for Vaishnavas.

श्रीरङ्गं करिशैलमञ्जनगिरिं ताक्ष्यार्द्रिसिंहाचलौ
श्रीकूर्मं पुरुषोत्तमं च बदरीनारायणं नैमिशम्।
श्रीमद्द्वारवतीप्रयागमथुरायोध्यागयाः पुष्करं
सालग्रामगिरिं निषेव्य रमते रामानुजोऽयं मुनिः॥ 7॥

According to historical sources, the Konark Temple was constructed by King Gajapati Narasingha Deva I of the Imperial Ganga Dynasty. This king ruled from (c. 1238–1264). The Imperial Ganga Dynasty was first established by King Anaṅgabhīma in the year c. 1230. There are two King Anakabhīmas listed under the Eastern Ganga Dynasty. King Anakabhīma II, who ruled from c. 1190–1198 and King Anakabhīma III of the Imperial Ganga Dynasty, who ruled from c. 1211–1238. The time period from c.1190 to c. 1245 coincides with that of the Poet Jayadeva, who composed the famous Gita Govindam for Lord Jagannatha. According to Wikipedia, The Poet Sri Jayadeva lived from c.1190 to c. 1245. The king of that period decreed that Gita Govindam should be sung daily in the Jagannath Temple.

One of the earlier Eastern Ganga kings, King Anantavarman Chodagangadeva, was possibly a follower of Swami Ramanujacharya, and the king assumed the titles of Paramavaishnava and Paramamahesvara.

King Anaṅgabhīma of the Imperial Ganga Dynasty dedicated his kingdom to Lord Jagannatha at Puri. He is said to have acknowledged the divinity of Puri both as the sole state deity of Odisha and as his divine overlord. Anaṅgabhīma and his successors declared that they were carrying out the divine order (adesha) of Lord Jagannatha. They called themselves the Son of Lord Jagannatha or the vassal of Lord Jagannatha.

King Gajapati Narasimha Deva I was described as Purushottama-Putra in the Ganga copper plate grants. It can be safely assumed that, as Purushottama-Putra, the King conceived Lord Vishnu as the Sun-God at Konark, thus making a connection to Lord Surya

Narayana. There is a stone carving of the king worshipping Lord Jagannatha at Konark.

Oriya literature also confirms the connection of Lord Surya Narayana with Konark. The 15th-century poet Sri Sarala Dasa mentioned in his Mahabarata that Lord Surya Narayana killed the Asura named Arka at Agni-Kona of Jambudwipa. As the Asura was killed at Agni-Kona, the place became Konarka Kshetra. Sri Sarala Dasa composed the Mahabarata from the perspective of a bagawatha (devotee). This composition brings out Lord Krishna as the Supreme Controller.

The ancient Sun Temple at Konarka was constructed in the 13th century for the worship of Lord Surya-Narayana.
In ancient times, Kings built temples on a grand scale. The temples were meant to be the pictorial representation of religious literature. From this perspective, the Konark Temple was conceived as a pictorial representation of the Upanishads.

Sculpture of King Narasimha Deva worshipping Lord Jagannatha at Konark

This page is intentionally left blank

Symbolism behind Sun Worship

The Target of Solar Worship:

Solar worship was quite prevalent in ancient times. The Sun was seen as the direct manifestation of the Supreme Paramatman. The Purusha Suktam describes the Supreme Purusha as one with the hue of the rising sun, Adithya varnam. The Chandogya Upanishad describes this Supreme Purusha in the Solar Orb as a beautiful being with a golden complexion, golden hair and even a golden moustache.

The Antaraditya Vidhya is one of the 32 Brahma Vidhyas. This Brahma Vidhya focuses on the Sun as a manifestation of the Supreme Paramatman. The target of the meditation taught by the Antaraditya Vidhya is not just the Sun, but the Sun, which has the Supreme Paramatman as the indwelling controller.

The Goddess Gayathri is invoked during the Sandhya Worship three times a day. She is worshipped as Gayathri, Savithri and Saraswati. The Sandhya Worship is performed at Sunrise, at midday when the Sun is directly above us in the sky, and at sunset. Savithri Rik is another name for the Gayathri Manthram. This manthram attracts the effulgent Supreme Paramatman and requests Him to reveal Himself to us. The Vedic verse mentions that brilliant rays emanate from the Supreme Purusha, making it difficult for us to see Him. He shines brilliantly like the sun and is hence unseen by us. We can meditate upon Him only if He reveals Himself to us. The Gayathri Manthram is a request for the Supreme Purusha to reveal Himself to us.

The Konark Temple is a pictorial representationof the Gayathri Manthra. The temple is in the form of a chariot with twelve pairs of wheels. The Gayathri Metre has eight syllables in each of its three pada, making it 24 in total. The temple has 24 wheels representing this sacred Gayathri Metre.

The Supreme Purusha, the target of worship in the Antaraditya Vidhya and the Gayathri Manthram, is none other than Lord Sriman Narayana. The Chandogya Upanishad, while describing the golden Purusha in the solar orb, states that kapyAsam puNdareekam yEvam akshiNI. This is the clue that identifies the Purusha inside the Solar Orb as Lord Sriman Narayana because He is the only one who has beautiful lotus-like eyes.
கம்பீராம்பஸ் ஸமுத்பூத ரவிகர விகசித பங்கஜ தள அமல-ஆயதேக்ஷணா. *Kam pipathi ithi kapihi. Kam means water. Pipathi means to drink. Kapi means that which drinks water. We all know that the Sun drinks the water. The word "aasam" means that which has been made to blossom. The word kapyasam in the above verse describes the beautiful red lotus*

which blossoms when touched by the warm rays of the Sun (kapyasam). Alternatively, A lotus stalk also drinks water. The lotus stalk is kapi. The lotus, which is attached to its stalk, has its seat (aasam) on the stalk. The lotus, which is seated on its stalk in a deep pond, looks very cool, fresh and attractive. This lotus is called kapyasam. In this context, kapyasam refers to the red lotus with a very long stalk, which always stays fresh because it uses its stalk to drink water from the pond! Lord Sriman Narayana's eyes resemble such a beautiful lotus that always looks cool and fresh.

The name of the deity mentioned in the Gayathri Manthram is Savitr. This name is the name given to the creator of the Universe. In the context of the manthra, it does not refer to the four-faced Lord Brahma, but to the Supreme Creator Lord Sriman Narayana, who created the creator Lord Brahma.

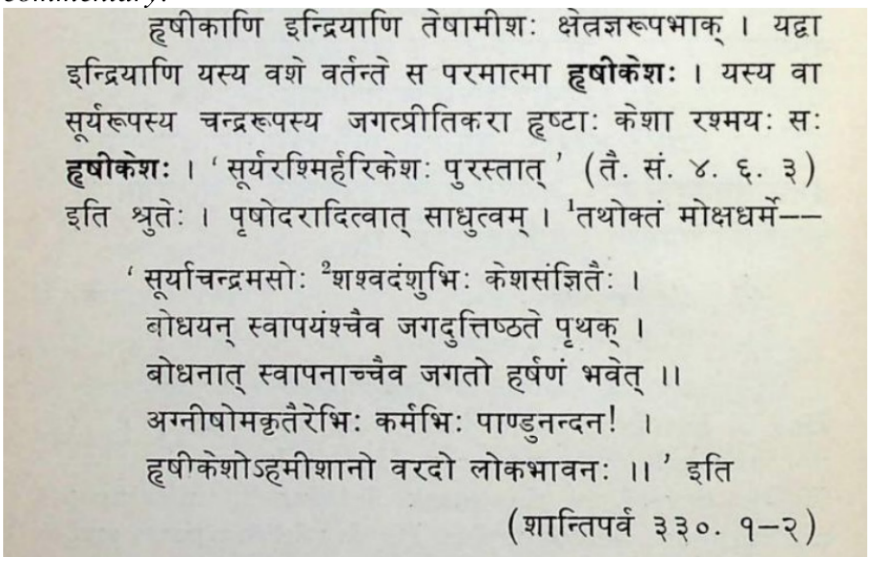
रविर्नारायणस्तेजः चन्द्रो नारायणो महः ।
वह्निर्नारायणः साक्षात् नारायण नमोऽस्तु ते ॥ ८॥

ravir nArAyaNastejah candrO nArAyaNO mahah |
vahnirnArAyaNah sAkshAt nArAyaNa namOstu tE || 6

The above slokam from the Narayana Hrdayam mentions that the effulgence of Lord Narayana is the Sun, and the light of Lord Narayana is the moon. This slokam reiterates the meaning of the 60th manthram of the Mahanarayanopanishad, in which Lord Sriman Narayana is eulogised as the antaryami of the Sun, the Moon, and Agni.

The name Hrishikesha highlights that Lord Sriman Narayana is the antaryami of the sun and the moon. The usual meaning provided by many for "Hrishikesha" is "the one who controls our senses, but "Hrishikesha" also means the one who makes others happy by showering His effulgence on them. This name refers to Lord Sriman Narayana empowering the Sun and the Moon with His brilliance, thus bestowing joy upon us through sunlight and moonlight. This explanation is found in the Vishnusahasranama commentary by Sri Chinmayananda and by Sri

P.Sankaranarayanan in the Sri Vishnusahasranama stotram commentary.



हृषीकाणि इन्द्रियाणि तेषामीशः क्षेत्रज्ञरूपभाक् । यद्वा इन्द्रियाणि यस्य वशे वर्तन्ते स परमात्मा **हृषीकेशः** । यस्य वा सूर्यरूपस्य चन्द्ररूपस्य जगत्प्रीतिकरा हृष्टाः केशा रश्मयः सः **हृषीकेशः** । 'सूर्यरश्मिर्हरिकेशः पुरस्तात्' (तै. सं. ४. ६. ३) इति श्रुतेः । पृषोदरादित्वात् साधुत्वम् । [1]तथोक्तं मोक्षधर्मे--

'सूर्याचन्द्रमसोः [2]शश्वदंशुभिः केशसंज्ञितैः ।
बोधयन् स्वापयंश्चैव जगदुत्तिष्ठते पृथक् ।
बोधनात् स्वापनाच्चैव जगतो हर्षणं भवेत् ।।
अग्नीषोमकृतैरेभिः कर्मभिः पाण्डुनन्दन! ।
हृषीकेशोऽहमीशानो वरदो लोकभावनः ।।' इति
(शान्तिपर्व ३३०. १–२)

The above image is the commentary of Sri Vishnu Sahasranama by Sri Adi Sankara Bagawathpadal. The acharya has given two meanings for the name Hrishikesha. Hrishikesha: He who controls the senses, the supreme Atman; or He who, in the form of sun and moon, delights the world by His (kesa) rays. Lord Krishna mentions in the Moksadharma in the Santi Parva of the Mahabharata (MB, Santi., 12. 330. 1-2) that, " The sun and moon through their rays known as kesa always uphold the universe as it were by awaking it and causing it to sleep. By such awaking and causing to sleep, the universe is delighted. It is in consequence of these acts of fire (Sun) and Soma who uphold the universe that I have come to be called by the name of Hrishikesha, O son of Pandu! Indeed, I am the boon-giver, the Lord, the sustainer of the universe."

The core philosophy of Sanathana Dharma revolves around Lord Sriman Narayana's antaryamitvam, and as evident from the examples from various texts given above, Lord Sriman Narayanan as the indwelling controller of the sun, is the target of sun-worship.

Architectural Symbolism:

The Time Lost in Worldly Pursuit:

The Sun is always pictured as riding on a chariot drawn by seven horses in the celestial orb. The seven horses are said to represent the seven colours in a ray of light. They also represent the seven days of the week. The temple at Konark is in the form of a chariot drawn by seven horses. The twenty-four wheels of the temple represent twenty-four hours in a day. Each wheel has 8 spokes, dividing the 24-hour day into 3-hour segments called Prahars. The twelve pairs of wheels represent twelve months of the year.

The sculptures at Konark have been the centre of controversy for decades. The sculptures represent an individual's personal journey. The sculptures represent the four boons: Dharma, Artha, Kama and Moksha sought by an individual. The temple in itself

represents a higher spiritual truth. As seen earlier, the goddess Gayatri is invoked in the Sandhya Worship. She is ***the*** *goddess who gives the spiritual birth, compared with which a person's natural birth due to karma is impure. This appears to be the main motif of the temple. Symbolically, nescience (Avidhya) is the mother of a person. As the child of Avidhya, a person is born with good and bad desires coexisting in their heart. There is a constant internal battle between one's desires and the senses, which are the target of these desires. This is the allegorical Deva-Asura war. The senses are the Devas, and the Asuras are the desires that attract the senses. When unwanted desires have an upper hand, a person wanders along the outer perimeter of the temple as depicted by carvings on the outer wall. Such an individual, under the power of ignorance, fails to see the Sun. With an agitated mind further heated by the fever of karma, the individual is lost in worldly pursuits, which in the end is nothing but a useless mirage.*

अविनयमपनय विष्णो दमय मनः शमय विषयमृगतृष्णाम् ।
भूतदयां विस्तारय तारय संसारसागरतः ॥ *1* ॥
அவினயமபனய விஷ்ணோ த³மய மன: ஶமய
விஷயம்ருக³த்ருஷ்ணாம் ।
பூ⁴தத³யாம் விஸ்தாரய தாரய ஸம்ஸாரஸாக³ரத: ॥ *1* ॥
avinayamapanaya viṣṇō damaya manaḥ śamaya
viṣayamṛgatṛṣṇām ।
bhūtadayāṃ vistāraya tāraya saṃsārasāgarataḥ ॥ *1* ॥

In the above slokam from the Vishnu Shatpadi Stothram composed by Sri Adi Sankara Bagawathpadal, the acharya prays to Lord Vishnu to subdue one's mind, and to control its interests in the worldly pleasures. He requests Lord Vishnu to reveal the path to cross the ocean of Samsara. In the above slokam, मृगतृष्ण *means mirage.*

*Thus lost in futile pursuit, the individual soul is reborn again and again.*पुनरपि जननं पुनरपि मरणं *punarapi jananam punarapi maranam. The passage of this time that is being wasted in futile pursuit is represented by the 24 large intricately carved wheels.*

The wheels are 9feet 9 inches (9'9") in diameter. The figures of dancers and musicians sculpted on the wheels draw our attention to the time being wasted in worldly enjoyment.

The Charioteer - Symbolism:

Aruna, the brother of Lord Garuda, is the charioteer of the Sun's chariot. Just as Arunodayam or dawn brings out the Sun to dispel the darkness of the night, sat-vidhya dispels ignorance and brings out the golden Purusha residing in the solar orb. The individual soul lost in worldly pursuits does not turn godward until it gains sat-vidhya, "Tat tvam asi".

Interestingly, it was Lord Surya who taught the Isavasopanishad to Sage Yagnavalkya. The famous verse "Tat tvam asi" is from this Upanishad.
Lord Surya starts the Upanishad by stating that the Supreme Purusha indwells in everything seen by Sage Yagnavalkya. There is nothing in which ***He*** *is not there. The world is called jagat because it undergoes constant transformation. The world is subject to changes. Living beings undergo changes in their physical appearance and in their attitude. The seasons and our surroundings change. But the Supreme Purusha never undergoes any changes and remains constant, and is hence even more wonderful than the constantly changing world.*

The Supreme Purusha has given us freedom to choose between good and bad. Depending on our choice, karma is accumulated, which further incites us to make certain choices. The Supreme Being only exists as an observer. He doesn't participate in our actions, nor does He incite us to act. We must, hence, not pass judgment on the path taken by an individual. Whether a person enters the sanctum immediately or whether the person walks around the outer perimeter of the temple first is between that individual and God. When we say that we act per God's will, it means that God has willed for us to act per our past karmas. But the moment we do even a single good deed, He steps in and guides us towards the right path.

Those who contend by just walking around the outer perimeter of the temple, i.e., individuals who enjoy life without realising God, who make money to be merry without knowing the invisible force that controls them, enter into a special world called "Asurya". This world is called Asurya because it is fit for Asuras. The word "Asura" here refers to people who are not Self-Realised and are not aware of the Supreme Being's Universal Proprietorship. The world is also called "Asurya" because it is devoid of the Sun. The world is covered with darkness, and there is not a single ray of light. The darkness referred here is not physical darkness but mental darkness, which is caused by ignorance.

Vishnu Purana, while narrating the anecdote of Yayati, mentions that worldly enjoyments do not satisfy one's desires, but the enjoyment fuels desire, like a fire fed with clarified butter. Such a fire born out of an individual's selfish needs is an asura. The fire of desire can only be subdued by the fire of right knowledge. Fighting fire (desire) with fire (right-knowledge). The brilliance of a fire is more evident at night, and it loses its brilliance in sunlight. The act of killing the fire of desire by the fire of knowledge is Lord Surya Narayana killing the Asura Arka. This is the central theme of Arka-Kshetra, Konarka.

Lord Surya teaches in the Isavasopanishad that Lord Narayana is the antaryami. The soul is part of the Supreme Being's divine body and hence is not separate from Him. Lord Sriman Narayana is not only the indwelling antaryami, but He is also the supreme controller. Even though He is the indwelling controller, Lord Sriman Narayana differs from the many souls and matter. He is unique because, while He controls the matter and the souls, no one controls Him or can even think about controlling Him. He is the controller of all. This makes Him the Paramatma, and everyone/everything else His body. The sat-vidhya and verses like "tat tvam asi" show us that Lord Sriman Narayanan is the antaryami in everyone and everything.

अवैमि दोषापगमस्य हेतुं तमोपहां सम्भृतपद्मरागाम् ।
अशेषवन्द्यां मणिपादुके त्वां रङ्गेशसूर्योदयपूर्वसन्ध्याम् ॥ १७.७॥ ५८७॥

avaImi dhOShApagamasya hEthum thamOpahAm
samBhruthapadhmarAgAm
ashEShavandhyAm maNipAdhukE!
thvAmrangEshasUryOdhayapUrvasanDhyAm

In the above slokam from Sri Ranganatha Paduka Sahasram, the Padukai of Lord Ranganatha are seen as the red dawn (arunodayam) that ushers in the Sun called Lord Ranganatha. With the appearance of dawn (Padukai), our sins, indicated by darkness, disappear. The Padukai thus makes it possible for everyone to see the hidden antaryami in the form of Lord Ranganatha.

The charioteer Aruna, in this context, is one's acharyan who teaches us "tat tvam asi" and makes us realise that Lord Sriman Narayanan is the supreme Paramatman.

The Turning Point – Makara Sankranthi:

Alternatively, the chariot of the Sun can be viewed as the body, with the Sun as the jevatma (soul). The horses represent the senses. It is not easy to control the horses which run after worldly desires. The chariot driven by the ignorant soul is lost in the wintry path (Dakshinayana).

The Soul's Journey:

During Dakshinayana, the sun travels through the sign of Leo, symbolically associated with arrogance and pride. The jeevatma, through Leo, gives in to false pride. As a result of false ego, when it arrives in the constellation of Virgo, it earns enemies, debt and illness(Virgo being the sixth sign of the zodiac). Weakened by its travel through Virgo, it reaches its house of debilitation, Libra. From here, it enters Scorpio, the 8th sign in the Zodiac, signifying unexpected events, incorrect occult knowledge and potential vices. This atma is met by Guru (Jupiter) in Sagittarius. The archer

represents the ninth sign of the Zodiac. This is the house of Jupiter, the Celestial Guru, who shows the jeevatma ***what*** *the true target is. Armed with this knowledge, it enters Capricorn, the house of Judgement. The jeevatma passes the test and enters the asterism Dhanishta, the fiery corner (archis). The door leading out of samsara, when opened, it enters the path of light archir adhi marga, when it enters Dhanishta in Aquarius, where it is welcomed with poorna kumbha.*

நாரணன் தமரைக்கண்டுகந்துநன்னீர்முகில்
பூரண பொற்குடம் பூரித்த துயர்விண்ணில்
நீரணி கடல்கள்நின்றார்த்தன நெடுவரைத்
தோரணம் நிரைத்தெங்கும் தொழுதனர் உலகரே

From here, it enters Pisces, a watery sign. Water in this sign represents the divine light. Two fish represent this zodiac. The two fish are the jeevatma in company with the Paramatma. The soul attains its true nature, in Aries, the house of the Sun's exaltation.

The Sunrise – Arunodayam:

An acharyan who bestows the right knowledge is the charioteer Aruna. With the right knowledge, the individual soul wins over the wintry darkness and turns the chariot northward (Godward). The start of the soul's journey towards God is symbolically celebrated as Makara Sankranti. Astronomically, the Sun enters Capricorn (Makara) just after the longest night of the year passes.

While the Sun's entry into Capricorn is celebrated as Makara Sankaranthi, the start of the Sun's Northward journey, the actual point when the Sun turns towards the north is celebrated as Ratha Sapthami. Astronomically, this turning point coincides with the Sun's entry into the asterism Dhanishta, alias Sravishta. This asterism spans from the end of Capricorn and extends into Aquarius. The portion of this asterism in Aquarius, as seen earlier, is called "Agni Kona" and marks the turning point towards Aries, the Sun's house of exaltation. Symbolically, this represents the soul's turning point in its journey, where it leaves behind the darkness of ignorance (winter) and proceeds Godward (house of exaltation in Aries). It appears as though Aquarius, represented as

the water-bearer, welcomes the reformed soul with a poorna kumbha!

No wonder Ratha Sapthami is still celebrated grandly in Konark to applaud the Sun's entry into the Sravishta asterism.

Once true knowledge is gained, the individual soul leaves the outer perimeter of the temple and enters the main sanctum.

***Note:** The journey of a soul can be symbolically represented by either the Sun's solar or the Moon's lunar journey through the zodiac. Interestingly, both the Sun and the Moon have their houses of debilitation in Libra and Scorpio, respectively and their houses of exaltation in Aries and Taurus.*

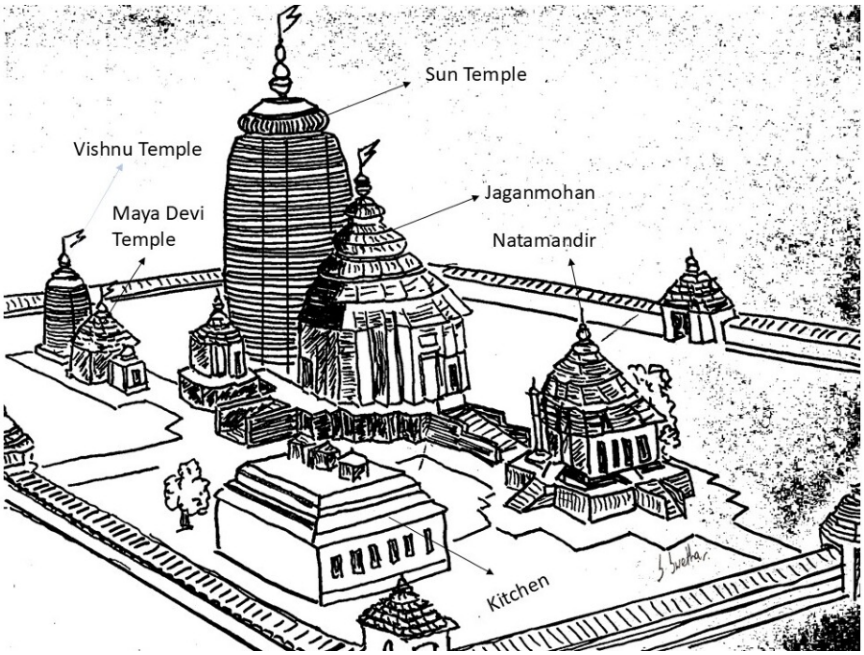
Mayadevi:

It is fascinating that the builders of Konark constructed a temple for Mayadevi within the complex. This temple is also in front of the Vishnu Temple.
Maya represents the creative power of Lord Sriman Narayana. Acharya Ramanuja mentions in his Geetha Bhashya that Lord Sriman Narayana created the maya consisting of the three Gunas (Satthva-Rajo-Tamas) for sport (Kreeda pravrutthena). This Maya created by Lord Sriman Narayana is divine in power (Dhiavi) and therefore cannot be easily overcome. This Maya of Lord Sriman Narayana is "absolutely real, and it hides the essential nature of Lord Sriman Narayana from the jeevatmas.

दैवी ह्येषा गुणमयी मम माया दुरत्यया |
मामेव ये प्रपद्यन्ते मायामेतां तरन्ति ते || *14*|| *BG 7.14*

daivī hyeṣhā guṇa-mayī mama māyā duratyayā
mām eva ye prapadyante māyām etāṁ taranti te

Lord Krishna states that, "Those who take refuge in Me alone shallpass beyond this Maya of Mine consisting of the three gunas."



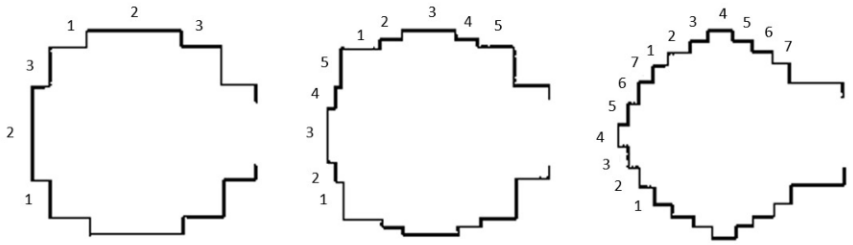
Is it a coincidence that the Mayadevi temple is built in front of the Vishnu temple as if Maya is hiding the Supreme Paramatman from the jeevatma's view?

Architectural Details

The ancient texts like Vastu-Shastra and Shilpa Shastra cover the construction of temples in detail. These texts focus on architectural styles and construction methodology. The architectural style varies between the northern and southern parts of India. The Nagara architectural style with curvilinear shikara is prevalent in the North, while the Dravidian style with its distinctive gopurams is common in the South.

The temples in Odisha follow a unique regional architectural style popularly known as Kalingan Style Architecture. The interior ground plan of a temple in Odisha is usually a square. Very rarely, a temple can also have a star-shaped layout, as in Boudh or a circular layout, as in Hirapur.

The temples are further classified by the number of vertical projections called rathas or pagas. As per this classification, we have trirathas, pancharathas, saptharathas and navarathas. A plan image (top view) of three of the above styles is given below.



Apart from the classification based on the number of vertical offsets, temple architecture is also subdivided into three distinct styles listed below.

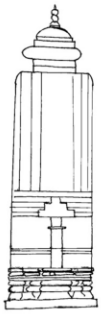
1. *Rekha Deula*
2. *Pidha Deula*
3. *Khakhara Deula*

Deula seems to be a regional variation of the Sanskrit word Devalaya, meaning temple.

Rekha Deula is associated with male deities Vishnu, Shiva and Surya. The Pidha Deula is mainly used for the temple's assembly hall, entrance porch and dance halls. The Khakhara Deula style is used in the construction of temples for female deities like Durga and Chamundi.

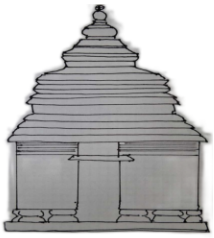
The above three styles are the vimana or the temple tower over the sanctum. Through the grand temple spire, the Odishan Architect showed the public the exact residence of God. In the Dravidian Style architecture, the tallest towers are the Gopurams, which are the gates of the temple and are not directly above the sanctum. In contrast, the Odishan temple spire is the tallest structure placed directly above the sanctum, announcing the supremacy of God to the world.

Rekha Deula:



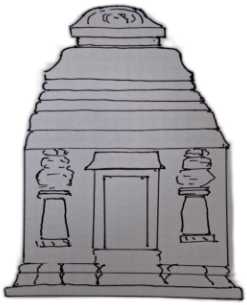
Rekha appears to be a regional variation of the Sanskrit word "Rekha रेखा*", meaning line. The style of the temple tower is curvilinear, as seen in the temple of Lord Puri Jagannath.*

Pidha Deual



*This style is represented by the stepped pyramidal roofs that adorn assembly halls, entrance porches and dance halls of a temple. The word Pidha, to me, seems to be a regional variation of the Sanskrit word "Peetam*पीठं*", meaning seat.*

Khakhara Deula

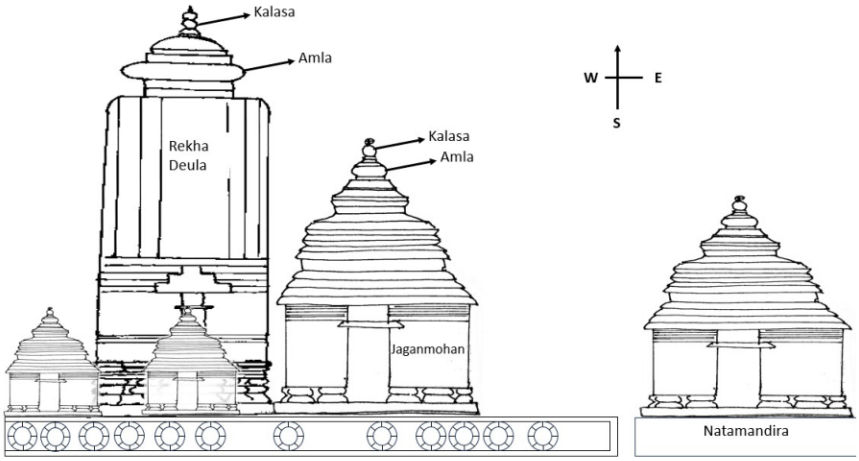


कर्कारु (*Karkaru)in Sanskrit is the name given to winter melon. Khakhara Deula has a semi-cylindrical roof that resembles a pumpkin. The temples for the female deities, like Durga, feature this style for the shikara.*

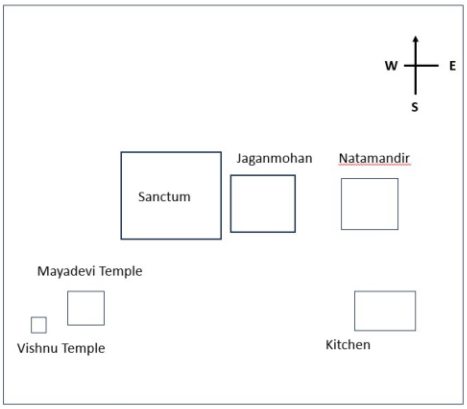
By looking at the type of temple spire/roof, the public can easily identify the location of the sanctum. From the spire style, they can also know the type of deity residing in the temple.

The Konark Temple had two structures: a main sanctum with a curvilinear shikara and a porch called Jaganmohan. The Jaganmohan and the main temple were constructed on one plinth. The entire structure represents the chariot of the Sun. There are twelve pairs of intricately carved wheels and seven horses. The wheels of the chariot temple are 9 feet 9 inches in diameter with 8 spokes. The axles project outward, making the wheels look very realistic. Of the seven horses, four were on the right and three on the left-hand side.

The Natamandir, which is also a Pidha Deula structure, is on a separate plinth.
The sideview of the original temple looked as shown in the image below. The image shown below is not drawn to scale. The following image does not show the charioteer, horses, etc.



The remnant of the temple that exists today does not have the Rekha Deula. Only a small portion of the main sanctum that was under the shikara exists. The restored Jaganmohan is still standing. The Natamandir does not have a roof. The temple is oriented on an East-West axis.



As mentioned in the previous chapter, within the Konark compound, there is also a temple for Mayadevi (Chayadevi), the

consort of the Sun, in the southwest corner. This temple entrance faces East. Behind this temple, there is another temple for Lord Vishnu.

This page is intentionally left blank.

Construction Details

The Konark Temple had two structures: a main sanctum with a curvilinear shikara and a porch called Jaganmohan. The Jaganmohan and the main temple were constructed on one plinth. The entire structure represents the chariot of the Sun. There are twelve pairs of intricately carved wheels and seven horses. The wheels of the chariot temple are 9 feet 9 inches in diameter with 8 spokes. The axles project outward, making the wheels look very realistic. Of the seven horses, four were on the right and three on the left-hand side.

Three flights of stairs (now broken) lead into the porch. The Jaganmohan is a square building constructed in the Pancha-Rathi style. Both the roofs of the Jaganmohan and the main temple were built by corbelling layers of stone above the wall. The roof is topped by a stone called "Amla", which is derived from "Amara Shila".The stone was called "Amara Shila" in the Shilpa Shastra and Vastu Shastra because it made a building immortal – amara. This stone was originally topped by a kalasa and a flag, both of which are missing. There are four doors in the Jaganmohan: three lead outwards and one leads into the main sanctum. The interior of the Jaganmohan is plain without any carving. There is only a moulding that runs around at a height of five feet.

Of the main temple, only a small portion has survived. There are three sculptures of Lord Surya: one on the southern side, the western side and the northern Side. Lord Surya is depicted on each of the three slabs differently as the images represent the sun at sunrise, midday and at sunset. The main idol inside the temple is missing.

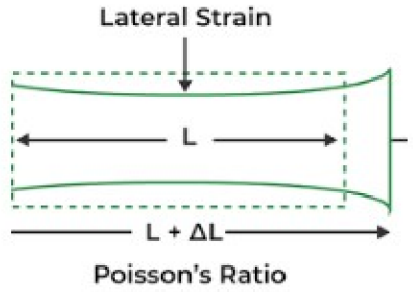
Like the temples of Puri and Bhubaneswar, this temple was also double-storied with an intermediate flat roof. It is assumed that the flat roof was supported on the walls with iron beams.

The passage from the Jaganmohan into the main temple was through a six-foot by fourteen-foot doorway.

The complex, like Puri, also has a Natamandir. This building also follows the Pancha-Rathi style, but it currently has no roof. This structure has four openings, 10 feet by 3in wide. This structure is a square with each side measuring 36feet by 9 inches. This building originally had a roof.

There is also a temple for Mayadevi and a temple for Lord Vishnu. The main chariot structure is oriented East to West. The compound runs East to West and has a length of 857 feet. The breadth of the compound is 540 feet.
There was a monolithic dwaja sthamba featuring the charioteer Aruna. This pillar was moved to Puri outside the Lion's Gate.

The structures were constructed in such a way that all materials were subjected to a transverse strain. That is, when a force is applied, strain (deformation) occurs perpendicular to the direction of the applied force. The temple walls are under compression as force is applied from the top. When a material is compressed, it gets shorter, but it also becomes wider.



There were lintels made of stone, sometimes supported on iron beams. The roofs spanning the large halls were built mostly by corbelling the walls. Corbelling is a technique that uses layered bricks or stones to support overhangs like balconies, arches and roofs. Corbelling is an overlapping arrangement of bricks or stones in which each course extends farther out from the vertical of the wall than the course below.

The intermediate roof of the main temple was supported on a large iron beam with smaller intermediate beams. A corbelled wall is balanced during construction primarily through counterbalancing with mass and the use of temporary structural supports (shoring/bracing). Once the walls and roof are constructed, the structure requires a dead load at the top. The deadload stabilises the compressive forces. This dead load is essential for maintaining structural stability.

The stone called "amala" functioned as the dead load. The original Sanskrit term for this stone is "Amara Shila, i.e., the stone that is essential in making the building "Amara" or lasting. The weight of this stone must be carefully calculated for the designed structure. Pillars were not required to support the roof since the amla or the load-stone provided the structural support by stabilising the compressive forces.
The iron beams used in the Konark temple are quite heavy. Some of them weigh five tons. The large iron beams were made by welding small iron bars (2" X 3")2inches by 3inches together. The welded bars were then beaten. Like the iron pillar in Delhi, these iron beams are also rust-proof.

Modern historians often wonder how these massive stones were lifted during construction. Necessity is the mother of invention. A civilisation that had constructed thousands of temples is sure to have developed machines and techniques to help with the construction work. Just because we do not know what these devices were does not imply that the ancient people did not use such machines.
Khondalite stone was the primary building material used. High-quality sculptures were carved out of chlorite stone.

This page is intentionally left blank.

Collapse of the Temple

Legend has it that the main idol of Lord Surya inside the temple floated over the temple floor due to the application of magnetic levitation. The legend mentions a large 52-ton lodestone at the top of the temple. It is assumed that the lodestone, which is a ferrimagnetic material in combination with a diamagnetic material, could have made the idol levitate. This type of levitation has been simulated in the laboratory and can be achieved without the application of electricity to create an electromagnetic field.

According to the legend, as the magnetic field from the lodestone disrupted the navigation of ships, the stone was removed by some sailors. The removal of the lodestone disrupted the gravitational field within the temple and resulted in the temple's collapse.

The lodestone theory remains a legend and has not been proved. It is more likely that it was the load stone (amara shila) and not the lodestone which was vandalised. When the dead load amala or amara shila) is removed from corbelled walls, it leads to structural instability, differential movement, cracking, and potentially catastrophic failure of the wall or the structure above, especially if no alternate support is provided. This will eventually lead to the collapse of the entire structure.

The Rekha Deula was built on a horizontal arch pattern. The horizontal arch pattern dome could not support itself for a long time when the top load-stone was removed. The ruin was inevitable. The stones dropped down in a compound mound.
The magnetic lodestone theory is not credible and lacks evidence. The collapse could not have been due to a natural catastrophe like an earthquake, because the Jaganmohan is still standing. Sinking of the foundation could be ruled out because both the main temple and the Jaganmohan were built on the same foundation. The theory that the temple was never completed is rejected because there are records of worship at the temple for several centuries before the collapse.

The theory that incorrect load was used to design the amla is not credible, as the amla from the temple was not found inside the compound.

The only credible explanation is the failure of the corbelling caused by the removal of the amla from the roof. Once the heavy load-stone was removed, the other blocks would have started to drop one by one in a gradual fashion, until one day, when the entire structure collapsed. There were large projecting cantilevered figures like lions on the roof that sped up the collapse when the main load was removed. A very large sculpture of a lion crouching on top of an elephant was originally 21 feet below the roof. Once the amla was taken off, this sculpture flipped and fell with great force on top of the Jaganmohan, leaving a big hole in the roof. The hole in the Jaganmohan with the fallen sculpture was noticed in 1901, before the commencement of restoration work.

The restoration work on the Jaganmohan was started in 1901. The version we see today is the repaired Jaganmohan.

The End

References

1. *Konarka The Black Pagoda of Orissa – By Bishan Swaroop, Executive Engineer.*
2. *Konark (World Heritage Series) – Debala Mitra*
3. *Magnetic Levitation of a Konark-Inspired Surya Idol: Blending Ancient Legend with Modern Technology - Devendra Soni (Civil Engineer)*
4. *Kulke H. King Anaṅgabhīma III, the veritable founder of the Gajapati kingship and of the Jagannātha trinity at Puri. Journal of the Royal Asiatic Society of Great Britain & Ireland.1981;113(1):26-39. doi:10.1017/S0035869X00136810*
5. *419-Fundamentals-of-Masonry-Part-B.pdf*
6. *Classical Odia by Pattanayak, D. P. (Debi Prasanna)*
7. *The history of medieval Vaishnavism in Orissa by Mukherjee, Prabhat*
8. *Master Class: Corbelling, Part 3, Roofs – The Stone Trust*
9. *Vishnu Sahasra Nam With Shankara Commentary Translated By R Ananth Hrishna Shastri*
10. *Ain-i-Akbari – Abul Fazl*
11. *Introducing Sarala Mahabharata By Suchitra G. Das*

This page is intentionally left blank

About The Author

Swetha Sundaram lives in Calgary, Alberta, Canada. She is an Instrumentation and Controls Engineer working in Calgary. She graduated from B.S. in Engineering Honours Program from the University of Guelph, Ontario, Canada. She writes on a variety of subjects; some of the topics include Sri Vaishnavism, health & diet, history and children's books. She believes in promoting love and equality. Apart from writing, her hobbies also include sketching, gardening and reading.

She was born in the temple city of Sri Rangam in Tamil Nadu, India. From childhood, she has been influenced by the Sri Vaishnavite philosophy. She is interested in knowing about ancient cultures. Her interests led her to study the ancient Vedic culture. She listens to many traditional lectures on Sanathana Dharma.

The author and her mother, Mrs Viji Sundaram, have co-written a book titled "The Green Banana and Lentil Diet. In the book titled "The Green Banana and Lentil Diet," the authors advocate for this combination as a diet for managing blood sugar and thereby reducing the clinical complications associated with type 2 diabetes.

You can contact the author at sundaramswetha@yahoo.com

To view other books by the author, please visit https://goo.gl/isALyd